

ABSTRACT OF THE DISCLOSURE

An antenna for use at UHF and upwards has a cylindrical ceramic core with a relative dielectric constant of at least

5 5. A three-dimensional radiating element structure, consisting of helical antenna elements on the cylindrical surface of the core and connecting radial elements on a distal end face of the core, is formed by conductor tracks plated directly on the core surfaces. At the distal end

10 face the elements are connected to an axially located feed structure in a plated axial passage of the core. The antenna elements are grounded on a plated sleeve covering a proximal part of the core which, in conjunction with the feeder structure, forms an integral balun for matching to an

15 unbalanced feeder.

~~Since the ceramic core fills the major part of the interior volume defined by the radiating element structure, the antenna is very much smaller than an air-cored antenna. It~~

20 ~~is also mechanically robust and electrically stable.~~